

	<p>University of North Texas College of Science Physics PHYS 1062 Section 050 Stars and the Universe - Hybrid</p>
---	---

Instructor and Course Contact Information

Instructor	Chris Littler
Email	clittler@unt.edu
My Online Office Hours	Friday 1pm-2pm or by appointment Zoom Link: https://unt.zoom.us/j/6451234567
Lab email	Email: astrolab@unt.edu
TA Tutoring Hours (Zoom and in ENV220 at these times)	See "Office Hours, Tutoring..." page after 1st week of Classes
Technical Support UIT Helpdesk	940-565-2324 Sage Hall 130 helpdesk@unt.edu
Mastering Astronomy Support	Direct Support: https://support.pearson.com/getsupport https://support.pearson.com/getsupport Phone: (800) 677-6337

Course Description

This introductory astronomy course offered by the UNT Physics Department provides a brief history of astronomy, gives an overview of the techniques and principles important in astronomy, and examines the life cycle of stars and galaxies in the known universe.

This is a **HYBRID COURSE** which is primarily internet based. There will be 5 laboratory exercises. Several opportunities for each of these labs will be given from which students will need to schedule. This course may be used to satisfy the University Core Curriculum requirement for Life and Physical Sciences.

Core Category: Life and Physical Sciences

TCCN: PHYS 1403

Credit: 3 hours (3; 2)

Pre-requisites

None

Course Objectives

By the end of this course, students will be able to:

- appraise our place in the universe
- assess the connections between human life and the universe as a complex, orderly system
- apply basic scientific principles to explain everyday phenomena
- recognize science as a process through which we seek to understand the world around us
- apply the critical thinking, empirical and quantitative skills needed to solve scientific problems

- express their scientific ideas in clear, logical, organized, and concise ways
- effectively communicate within small groups
- evaluate scientific validity as life-long learners.

Required Materials

Text: *The Essential Cosmic Perspective* (9th Edition)

by Jeffrey O. Bennett, Megan O. Donahue, Nicholas Schneider, Mark Voit

Homework + Study Guide: *MasteringAstronomy* (purchased access code)

Recommend: *MasteringAstronomy* with eText ISBN: 8220144725733

This version is the least expensive and contains both the e-text and access to MasteringAstronomy.

You will have **free access Mastering Astronomy for 14 days after the date that you first access the site**. After that time, you must have purchased and entered an access code to complete pre-lecture and homework assignments.

Access to a Computer or Laptop: Some assignments cannot be completed from mobile devices such as phone, tablets, or Chromebooks. You will need administrator access to this computer to install software for labs.

Other: A scientific calculator will be needed for labs. An app on your phone should do the trick.

Technical Skill Requirements

To be successful in this course, you will need to be proficient in the following:

- Using Canvas
- Downloading and uploading files
 - Includes downloading and installing software on your computer
 - Scanning or taking pictures of documents and uploading them to Canvas
- Sending and receiving emails
- Using *MasteringAstronomy* (tutorials available in course as extra credit assignments)
- Using Zoom Online meeting software to access office or tutoring hours

Course Communication and Assistance

Announcements

I will post Announcements regularly in Canvas. Read these announcements carefully: I may use them to tell you important information about activities, changes in due dates, ways to resolve problems, or hints for success.

Email

Since this is predominantly an online course, email will be our main point of contact. Make sure to check your email associated with Canvas frequently. Canvas conventionally keeps an inbox for you on the course webpage, so in the very least, check there. I will generally respond to emails within 24 hours unless it's the weekend, in which case I will get back to you Monday.

IMPORTANT: For any emails you send make sure to include PHYS 1062 in the subject of the email. This will help me prioritize your email so I can get back to you quickly.

Office Hours

During my online office hours, I will be available to answer any questions via my Zoom Personal Meeting room. The links for these can be found at top of this Syllabus and under "Office Hours, Tutoring, and Other Student Support" on the course Canvas page. We can also schedule a meeting if you email me 24 hours in advance so we can coordinate a time. Please only access the room at the times listed as other meetings might be held for different purposes at other times.

On Campus Tutoring/Open Lab Hours

Times for Tutoring or Open Lab will be posted during the first week of class. Students may come with questions or visit to get help from TAs on how to work through Labs. This is especially useful for the replacement lab.

Technical Support

The UIT Helpdesk will provide support with any issues you might have with Canvas and they may be able to help you troubleshoot other computer issues. 940-565-2324 or helpdesk@unt.edu

Mastering Astronomy Support

[Help with Mastering Astronomy for Canvas](https://help.pearsoncmg.com/integration/cg/canvas/student/en/content/get_started.htm)

(https://help.pearsoncmg.com/integration/cg/canvas/student/en/content/get_started.htm)

[Pearson Back to School Website](#) | [Direct Support](#) | Phone: (833)-585-1828

Course Outline, Assignments, and Grades

The course is divided into 14 Modules. Each module contains a Reading Assignments, Pre-lecture Videos and Questions, Homework Assignments, and Self Tests. These items are outlined in each Modules To-Do Checklist and Objectives section. There are 4 Exams. There are 5 Labs. Important information on Labs and how to schedule them can be found in a Lab Syllabus document which can be found in the 501 section of Canvas. **The Course Calendar at the end of the syllabus lists the full course outline and due dates for items to be submitted.** The Table below outlines the all the assignments for the course and how they will be weighted towards your final grade.

Assignment	Points Possible	Percentage of Final Grade
Course Orientation Quiz <ul style="list-style-type: none"> Attempt after reading Syllabus and watching Orientation Video 	20 points	2%
Prelecture Video and Questions <ul style="list-style-type: none"> 14 Assignments @ 10 points each <ul style="list-style-type: none"> Two lowest scores will be dropped 	120 points	12%
Homework <ul style="list-style-type: none"> 14 Assignments @ 20 points each <ul style="list-style-type: none"> Two lowest scores will be dropped 	240 points	24%
Labs <ul style="list-style-type: none"> Lab Orientation Quiz (20 points) 5 Labs <ul style="list-style-type: none"> This includes prelab assignment that must be completed before lab 	200 points	20%
Exams <ul style="list-style-type: none"> 4 Exams @ 105 points each 	420 points	42%
Total Points Possible	1000 points	100%

Divide your total points earned by 10 to obtain the percentage and determine your final grade

A = 90 to 100 B = 80 to 89 C = 70 to 79 D = 60 to 69 F = below 60

IMPORTANT: All assignments are due by the time/date listed on the Course Calendar at the end of the Syllabus. Since we drop 2 Pre-lecture assignments and 2 Homework assignments, we do not extend due date deadlines for any assignments. If for any reason you miss an Exam, you must notify your instructor within 48 hours of missing it in order to get an opportunity to make it up.

Orientation Quiz

This is a quiz to ensure you are familiar with the course. You will complete it after reading carefully through this document. You will get 3 attempts and will be awarded the highest score you receive.

Prelecture Video and Questions

Each of the Modules 1-14 has a *Prelecture Video and Questions* assignment posted in *MasteringAstronomy* which is accessed through the course Canvas website.

- Each pre-lecture assignment is worth 10 points.
- The best 12 scores (of 14 possible) will count toward your course grade.
- Each assignment will consist of a short video and a few questions to be answered and submitted online for grading.
- Timing of these assignments is key. No extensions will be granted, and late assignments will not be graded.

Homework

Each of the Modules 1-14 has a *Homework* assignment posted in *MasteringAstronomy* and accessed through the course Canvas website.

- Each homework assignment is worth 20 points.
- The best 12 scores (out of 14 possible) will count toward your course grade.
- You will have 3 attempts for each question, each incorrect attempt will reduce the possible score
- Late assignments will receive a 10% penalty off for each day the assignment is late

Exams

Four 70-minute, 50 question exams will be given during this course. Each exam is worth 105 points toward your course point total. See the Course Calendar for the windows to complete them and the due dates. Review material is posted along with the Exams, but it is also a good idea to review your homework and prelectures in preparation.

- Exam #1 covers Modules 1-3
- Exam #2 covers Modules 4-6
- Exam #3 covers Modules 7-10
- Exam #4 covers Modules 11-14 + “Common Knowledge” questions

Labs

MAKE SURE TO REVIEW LAB SYLLABUS AND LAB ORIENTATION VIDEO IN PHYS 1062 Section 501/502 in CANVAS

Course Expectations

As the instructor in this course, I am responsible for

- providing course materials that will assist and enhance your achievement of the stated course goals, guidance,
- providing timely and helpful feedback within the stated guidelines, and
- assisting in maintaining a positive learning environment for everyone.

As a student in this course, you are responsible for

- reading and completing all requirements of the course in a timely manner,
- working to remain attentive and engaged in the course and interact with your fellow students
- assisting in maintaining a positive learning environment for everyone.

Taking an online course is very different from taking an on-campus course: here the student is more responsible for his/her/their own learning. We have provided tools that you can use to facilitate this learning, but it will require self-discipline and motivation as well as effective time management to get the most out of this course and have the best shot at earning a good grade.

Hints to being a successful online student (Strongly suggested!):

1. **Start early in the week!** Do not wait until the day you are supposed to be done with the module. If you do, you will not be able to get through all of the material and you will already be behind. We can't emphasize this point enough! Fight any tendency to procrastinate and **start early!**
2. **Pay attention to the deadlines!** You can expect to spend at least as much time on this course as you would an on-campus course. So if you normally spend 3 – 4 hours a week attending class, 3 – 6 hours a week reading and doing homework, then expect to spend at least 6 – 12 hours a week on this course. For summer courses, you will generally be completing a Module every day of the week and should expect to spend at least 5-6 hours on this course per day. Remember, when estimating how long it will take you to accomplish a task, it always takes longer. Double your estimate and adjust your schedule accordingly.
3. No question is a dumb question. If you can't find a piece of information or have a question about how to do something in Canvas/*MasteringAstronomy*, please ask! Get your answer so that you can keep moving forward with the course.
4. **Start Early!** Don't Procrastinate!

Dropping the course: The last day you can drop this course and earn a grade of a W is November 7, 2025. Instructions for dropping the course are found [here](#).

UNT Policies

Academic Integrity Policy

Academic Integrity Standards and Consequences. According to UNT Policy 06.003, Student Academic Integrity, academic dishonesty occurs when students engage in behaviors including, but not limited to cheating, fabrication, facilitating academic dishonesty, forgery, plagiarism, and sabotage. A finding of academic dishonesty may result in a range of academic penalties or sanctions ranging from admonition to expulsion from the University. [Insert specific sanction or academic penalty for specific academic integrity violation.]

ADA Policy

UNT makes reasonable academic accommodation for students with disabilities. Students seeking accommodation must first register with the Office of Disability Accommodation (ODA) to verify their eligibility. If a disability is verified, the ODA will provide a student with an accommodation letter to be delivered to faculty to begin a private discussion regarding one's specific course needs. Students may request accommodations at any time, however, ODA notices of accommodation should be provided as early as possible in the semester to avoid any delay in implementation. Note that students must obtain a new letter of accommodation for every semester and must meet with each faculty member prior to implementation in each class. For additional information see the [ODA website \(https://disability.unt.edu/\)](https://disability.unt.edu/).

Prohibition of Discrimination, Harassment, and Retaliation (Policy 16.004)

The University of North Texas (UNT) prohibits discrimination and harassment because of race, color, national origin, religion, sex, sexual orientation, gender identity, gender expression, age, disability, genetic information, veteran status, or any other characteristic protected under applicable federal or state law in its application and admission processes; educational programs and activities; employment

policies, procedures, and processes; and university facilities. The University takes active measures to prevent such conduct and investigates and takes remedial action when appropriate.

Emergency Notification & Procedures

UNT uses a system called Eagle Alert to quickly notify students with critical information in the event of an emergency (i.e., severe weather, campus closing, and health and public safety emergencies like chemical spills, fires, or violence). In the event of a university closure, please refer to Canvas for contingency plans for covering course materials.

Retention of Student Records

Student records pertaining to this course are maintained in a secure location by the instructor of record. All records such as exams, answer sheets (with keys), and written papers submitted during the duration of the course are kept for at least one calendar year after course completion. Course work completed via the Canvas online system, including grading information and comments, is also stored in a safe electronic environment for one year. Students have the right to view their individual record; however, information about student's records will not be divulged to other individuals without proper written consent. Students are encouraged to review the Public Information Policy and the Family Educational Rights and Privacy Act (FERPA) laws and the University's policy. See UNT Policy 10.10, Records Management and Retention for additional information.

Acceptable Student Behavior

Student behavior that interferes with an instructor's ability to conduct a class or other students' opportunity to learn is unacceptable and disruptive and will not be tolerated in any instructional forum at UNT. Students engaging in unacceptable behavior will be directed to leave the classroom and the instructor may refer the student to the Dean of Students to consider whether the student's conduct violated the Code of Student Conduct. The University's expectations for student conduct apply to all instructional forums, including University and electronic classroom, labs, discussion groups, field trips, etc. Visit UNT's [Code of Student Conduct](https://deanofstudents.unt.edu/conduct) (https://deanofstudents.unt.edu/conduct) to learn more.

Access to Information - Eagle Connect

Students' access point for business and academic services at UNT is located at: my.unt.edu. All official communication from the University will be delivered to a student's Eagle Connect account. For more information, please visit the website that explains Eagle Connect and how to forward e-mail [Eagle Connect](https://it.unt.edu/eagleconnect) (https://it.unt.edu/eagleconnect).

Student Evaluation Administration Dates

Student feedback is important and an essential part of participation in this course. The student evaluation of instruction is a requirement for all organized classes at UNT. The survey will be made available during weeks 13, 14 and 15 [insert administration dates] of the long semesters to provide students with an opportunity to evaluate how this course is taught. Students will receive an email from "UNT SPOT Course Evaluations via IASystem Notification" (no-reply@iasystem.org) with the survey link. Students should look for the email in their UNT email inbox. Simply click on the link and complete the survey. Once students complete the survey they will receive a confirmation email that the survey has been submitted. For additional information, please visit the [SPOT website](http://spot.unt.edu/) (http://spot.unt.edu/) or email spot@unt.edu.

Sexual Assault Prevention

UNT is committed to providing a safe learning environment free of all forms of sexual misconduct, including sexual harassment sexual assault, domestic violence, dating violence, and stalking. Federal

laws (Title IX and the Violence Against Women Act) and UNT policies prohibit discrimination on the basis of sex, and therefore prohibit sexual misconduct. If you or someone you know is experiencing sexual harassment, relationship violence, stalking, and/or sexual assault, there are campus resources available to provide support and assistance. UNT's Survivor Advocates can assist a student who has been impacted by violence by filing protective orders, completing crime victim's compensation applications, contacting professors for absences related to an assault, working with housing to facilitate a room change where appropriate, and connecting students to other resources available both on and off campus. The Survivor Advocates can be reached at SurvivorAdvocate@unt.edu or by calling the Dean of Students Office at 940-565- 2648. Additionally, alleged sexual misconduct can be non-confidentially reported to the Title IX Coordinator at oeo@unt.edu or at (940) 565 2759.

Important Notice for F-1 Students taking Distance Education Courses

Federal Regulation

To read detailed Immigration and Customs Enforcement regulations for F-1 students taking online courses, please go to the [Electronic Code of Federal Regulations website](http://www.ecfr.gov/) (<http://www.ecfr.gov/>). The specific portion concerning distance education courses is located at Title 8 CFR 214.2 Paragraph (f)(6)(i)(G).

The paragraph reads:

(G) For F-1 students enrolled in classes for credit or classroom hours, no more than the equivalent of one class or three credits per session, term, semester, trimester, or quarter may be counted toward the full course of study requirement if the class is taken on-line or through distance education and does not require the student's physical attendance for classes, examination or other purposes integral to completion of the class. An on-line or distance education course is a course that is offered principally through the use of television, audio, or computer transmission including open broadcast, closed circuit, cable, microwave, or satellite, audio conferencing, or computer conferencing. If the F-1 student's course of study is in a language study program, no on-line or distance education classes may be considered to count toward a student's full course of study requirement.

University of North Texas Compliance

To comply with immigration regulations, an F-1 visa holder within the United States may need to engage in an on-campus experiential component for this course. This component (which must be approved in advance by the instructor) can include activities such as taking an on-campus exam, participating in an on-campus lecture or lab activity, or other on-campus experience integral to the completion of this course.

If such an on-campus activity is required, it is the student's responsibility to do the following:

- (1) Submit a written request to the instructor for an on-campus experiential component within one week of the start of the course.
- (2) Ensure that the activity on campus takes place and the instructor documents it in writing with a notice sent to the International Student and Scholar Services Office. ISSS has a form available that you may use for this purpose.

Because the decision may have serious immigration consequences, if an F-1 student is unsure about his or her need to participate in an on-campus experiential component for this course, s/he should contact

the UNT International Student and Scholar Services Office (telephone 940-565-2195 or email internationaladvising@unt.edu) to get clarification before the one-week deadline.

Student Verification

UNT takes measures to protect the integrity of educational credentials awarded to students enrolled in distance education courses by verifying student identity, protecting student privacy, and notifying students of any special meeting times/locations or additional charges associated with student identity verification in distance education courses.

See [UNT Policy 07-002 Student Identity Verification, Privacy, and Notification and Distance Education Courses](https://policy.unt.edu/policy/07-002) (<https://policy.unt.edu/policy/07-002>).

Use of Student Work

A student owns the copyright for all work (e.g. software, photographs, reports, presentations, and email postings) he or she creates within a class and the University is not entitled to use any student work without the student's permission unless all of the following criteria are met:

- The work is used only once.
- The work is not used in its entirety.
- Use of the work does not affect any potential profits from the work.
- The student is not identified.
- The work is identified as student work.

If the use of the work does not meet all of the above criteria, then the University office or department using the work must obtain the student's written permission.

Download the UNT System Permission, Waiver and Release Form

Transmission and Recording of Student Images in Electronically-Delivered Courses

1. No permission is needed from a student for his or her image or voice to be transmitted live via videoconference or streaming media, but all students should be informed when courses are to be conducted using either method of delivery.
2. In the event an instructor records student presentations, he or she must obtain permission from the student using a signed release in order to use the recording for future classes in accordance with the Use of Student-Created Work guidelines above.
3. Instructors who video-record their class lectures with the intention of re-using some or all of recordings for future class offerings must notify students on the course syllabus if students' images may appear on video. Instructors are also advised to provide accommodation for students who do not wish to appear in class recordings.

Example: This course employs lecture capture technology to record class sessions. Students may occasionally appear on video. The lecture recordings will be available to you for study purposes and may also be reused in future course offerings.

No notification is needed if only audio and slide capture is used or if the video only records the instructor's image. However, the instructor is encouraged to let students know the recordings will be available to them for study purposes.

Academic Support & Student Services

Student Support Services

Mental Health

UNT provides mental health resources to students to help ensure there are numerous outlets to turn to that wholeheartedly care for and are there for students in need, regardless of the nature of an issue or its severity. Listed below are several resources on campus that can support your academic success and mental well-being:

- [Student Health and Wellness Center](https://studentaffairs.unt.edu/student-health-and-wellness-center) (https://studentaffairs.unt.edu/student-health-and-wellness-center)
- [Counseling and Testing Services](https://studentaffairs.unt.edu/counseling-and-testing-services) (https://studentaffairs.unt.edu/counseling-and-testing-services)
- [UNT Care Team](https://studentaffairs.unt.edu/care) (https://studentaffairs.unt.edu/care)
- [UNT Psychiatric Services](https://studentaffairs.unt.edu/student-health-and-wellness-center/services/psychiatry) (https://studentaffairs.unt.edu/student-health-and-wellness-center/services/psychiatry)
- [Individual Counseling](https://studentaffairs.unt.edu/counseling-and-testing-services/services/individual-counseling) (https://studentaffairs.unt.edu/counseling-and-testing-services/services/individual-counseling)

Chosen Names

A chosen name is a name that a person goes by that may or may not match their legal name. If you have a chosen name that is different from your legal name and would like that to be used in class, please let the instructor know. Below is a list of resources for updating your chosen name at UNT.

- [UNT Records](#)
- [UNT ID Card](#)
- [UNT Email Address](#)
- [Legal Name](#)

**UNT eulDs cannot be changed at this time. The collaborating offices are working on a process to make this option accessible to UNT community members.*

Additional Student Support Services

- [Registrar](https://registrar.unt.edu/registration) (https://registrar.unt.edu/registration)
- [Financial Aid](https://financialaid.unt.edu/) (https://financialaid.unt.edu/)
- [Student Legal Services](https://studentaffairs.unt.edu/student-legal-services) (https://studentaffairs.unt.edu/student-legal-services)
- [Career Center](https://studentaffairs.unt.edu/career-center) (https://studentaffairs.unt.edu/career-center)
- [Multicultural Center](https://edo.unt.edu/multicultural-center) (https://edo.unt.edu/multicultural-center)
- [Counseling and Testing Services](https://studentaffairs.unt.edu/counseling-and-testing-services) (https://studentaffairs.unt.edu/counseling-and-testing-services)
- [Pride Alliance](https://edo.unt.edu/pridealliance) (https://edo.unt.edu/pridealliance)
- [UNT Food Pantry](https://deanofstudents.unt.edu/resources/food-pantry) (https://deanofstudents.unt.edu/resources/food-pantry)

Academic Support Services

- [Academic Resource Center](https://clear.unt.edu/canvas/student-resources) (https://clear.unt.edu/canvas/student-resources)
- [Academic Success Center](https://success.unt.edu/asc) (https://success.unt.edu/asc)
- [UNT Libraries](https://library.unt.edu/) (https://library.unt.edu/)
- [Writing Lab](http://writingcenter.unt.edu/) (http://writingcenter.unt.edu/)

**ASSIGNMENTS ARE DUE AT 11:59 PM ON THE DUE DATE LISTED ON THIS
CALENDAR**

	MON	TUES	WED	THURS	FRI
WK 1	Aug 18 Course Begins SCHEDULE YOUR LABS THIS WEEK	19	20 Orientation Quiz	21	22 Mastering-- Extra Credit due
WK 2	25 <i>Module 1 Begins</i> LABS BEGIN THIS WEEK	26 Prelecture 01	27	28	29 Homework 01
WK 3	Sept 1 <i>Module 2 Begins</i>	2 Prelecture 02	3	4	5 Homework 02
WK 4	8 <i>Module 3 Begins</i>	9 Prelecture 03	10	11	12 Homework 03 Exam 1 Opens
WK 5	15 Exam 1 Closes @11:59pm <i>Module 4 Begins</i>	16 Prelecture 04	17	18	19 Homework 04
WK 6	22 <i>Module 5 Begins</i>	23 Prelecture 05	24	25	26 Homework 05
WK 7	29 <i>Module 6 Begins</i>	30 Prelecture 06	Oct 1	2	3 Homework 06 Exam 2 Opens
WK 8	6 Exam 2 Closes @11:59pm <i>Module 7 Begins</i>	7 Prelecture 07	8	9	10 Homework 07
	MON	TUES	WED	THURS	FRI

WK 9	13 <i>Module 8 Begins</i>	14 Prelude 08	15	16	17 Homework 08
WK 10	20 <i>Module 9 Begins</i>	21 Prelude 09	22	23	24 Homework 09
WK 11	27 <i>Module 10 Begins</i>	28 Prelude 10	29	30	31 Homework 10 Exam 3 Opens
WK 12	Nov 3 Exam 3 Closes @11:59pm <i>Module 11 Begins</i>	4 Prelude 11	5	6	7 Homework 11
WK 13	10 <i>Module 12 Begins</i>	11 Prelude 12	12	13	14 Homework 12
WK 14	17 <i>Module 13 Begins</i>	18 Prelude 13	19	20	21 Homework 13
WK 15	24 <i>Thanksgiving</i>	25 <i>Thanksgiving</i>	26 <i>Thanksgiving</i>	27 <i>Thanksgiving</i>	28 <i>Thanksgiving</i>
WK 16	Dec 1 <i>Module 14 Begins</i>	2 Prelude 14	3 All Extra Credit is Due	4	5 Homework 14
WK 17	8 Final Exam Opens	9	10 Final Exam Closes @11:59pm Course Ends	11	12

